

REMARKS

In an Official Action dated September 19, 2006, the Examiner rejected the pending claims as anticipated or obvious in light of several references. Applicant requests that the Examiner reconsider the rejection in light of the following discussion.

Merchant 6,616,696

Claims 50-58 and 69-83 were rejected as anticipated by Merchant 6,616,696. However, as discussed below, Merchant '696 teaches a system that suffers from the problems associated with the patello-femoral implants known prior to Applicant's invention.

Merchant teaches a system in which the knee joint can be replaced in stages. For instance, the knee joint may only require replacing the surfaces between the patella and the femur. In such an instance, the Merchant system allows the surgeon to implant a patella prosthesis 184 and a trochlear prosthesis 182. If the knee further degrades so that the surfaces between the femur and the tibia need to be replaced, the trochlear prosthesis 182 can be replaced with a femoral prosthesis 110. The patella prosthesis 184 is configured to cooperate with the femoral prosthesis 110, so the patella prosthesis does not need to be replaced when the femoral prosthesis is implanted. See col 4, lines 2-9.

However, neither the trochlear prosthesis 182 nor the femoral prosthesis 110 of Merchant teach or suggest the features of Applicant's device. The trochlear prosthesis 182 is similar to other known devices. And as discussed previously, such trochlear prostheses are not configured to overlie the intercondylar notch. Therefore, such prostheses do not provide an appropriate articular surface in deep flexion.

Further, the femoral prosthesis 110 in Merchant is a prosthesis used for a

total knee replacement. Therefore, the device overlies the surfaces on the condyles that articulate with an implant on the tibia.

In contrast to the devices in Merchant, Applicant's device is configured to provide an articular surface that cooperates with the patella in deep flexion—and does so without necessarily replacing the entire knee. Applicant's device accomplishes this by providing a portion that extends along the intercondylar notch without overlying the condyles. For instance, referring to Applicant's Figure 4, the prosthesis may include a pair of extensions 77 and 78 that extend away from the trochlear portion 72. The extensions are configured to overlie a portion of the intercondylar notch.

Referring to claim 50, the claim recites a body that is configured to overlie the trochlear groove. The device also includes an intercondylar notch portion that is connected with the body and projects transverse the body. The trochlear implant 130 in Merchant does not include such an intercondylar notch portion. The trochlear implant in Merchant simply overlies the trochlear groove. Further, the trochlear implant 130 does not have any element that is transverse the trochlear portion. Accordingly, the trochlear implant of Merchant does not teach or suggest the features of claim 50.

Merchant discloses two alternate trochlear implants 182 and 188. However, the only difference between implants 130 and 182, 188 is that the implants are configured to cooperate with patellar implants 112, 184, 190 having different configurations. None of the trochlear implants teaches or suggests a prosthesis having an intercondylar notch portion connected to a body configured to overlie the trochlear groove and projecting transverse the body portion.

Further, with respect to dependent claims 51-58, the Official Action states that embodiment 186 teaches the features of the dependent claims. However, this is both untrue, and inappropriate. First, element 186 is a femoral implant designed to

replace all of the articular surfaces of the femur – it overlies the trochlear groove, the condyles and the intercondylar notch. However, claim 50 recites that

the intercondylar notch portion has outer edges that terminate so that the intercondylar notch portion is configured to overlie at least a portion of the intercondylar notch without substantially extending over an articular surface between a condyle and the tibia.

In other words, claim 50 recites that the prosthesis overlies the intercondylar notch without overlying the condyles. In contrast, element 186 is configured to overlie the condyles. Therefore, element 16 cannot meet the features of claim 50 or any of the dependent claims. Further, there is no rationale given for attempting to mix and match portions of elements 182 and 186. And there is no teaching in Merchant of any reason to mix and match portions of elements 182 and 186.

Still further, the Examiner "reminds" Applicant that the phrase "comprising" can include other limitations. However, claim 50 uses the phrasing "consisting essentially of".

In light of the foregoing, Applicant requests that the Examiner reconsider the rejection of claim 50 and dependent claims 51-58 as anticipate by Merchant.

With respect to claim 69, the teaching of Merchant is similarly lacking. Claim 69 recites an intercondylar notch portion connected with a trochlear groove portion and projecting transverse the trochlear groove portion. Merchant does not have such features, it simply has a trochlear groove portion. Similarly, Merchant does not teach an intercondylar notch portion configured to overlie a portion of the intercondylar notch without substantially extending over an articular surface of a condyle.

As discussed previously, the trochlear implants 130, 182, 188, of Merchant do not teach the features of the intercondylar notch portion recited in claim 69. Further, with respect to the femoral implants, 110, 186, 192, these implants are designed to replace the entire end of the femur. Therefore, the femoral implants necessarily overlie the articular surfaces of the condyles, contrary to claim 69. Still further, claim 69 recites that the intercondylar notch portion "forms a terminal portion of the femoral prosthesis". Therefore, even if the Examiner attempts to pick and choose portions of the femoral implants 110, 186, 192 in Merchant to read on some of the features of claim 69, the femoral implants cannot read on claim 69 because they cannot have a terminal edge along the intercondylar notch—they must extend over the condyles; otherwise, the femoral implants will not accomplish the task for which they are design— i.e. replacing the condylar surface of the femur.

Further, Merchant does not teach or suggest the features of dependent claims 70-77. For instance, claim 72 recites that the intercondylar portion includes medial and lateral portions that extend away from one another to form a gap. Clearly, the trochlear implants in Merchant do not teach such features; and as stated above, the femoral implants cannot read on claims 69-77 because the femoral implants cannot have a terminal edge along the intercondylar notch. Accordingly, Applicant requests that the Examiner reconsider the rejection of claim 69 and dependent claims 70-77.

Similarly, claim 78 recites a prosthesis having a second portion connected with a first portion that is configured to overlie a portion of the trochlear groove. The second portion projects transverse the first portion and is configured to overlie a portion of the intercondylar notch. Further, the second portion is configured so that the prosthesis has a terminal edge along the intercondylar notch. As discussed above in connection with claim 69, Merchant does not teach or suggest an implant having a portion that projects transverse a portion overlying the trochlear groove, and also having

a portion that overlies the intercondylar notch and forming a terminal edge along the intercondylar notch. Instead, the Merchant implants either terminate along the trochlear groove or overlie the entire femur, including the condyles. Accordingly, Applicant requests that the Examiner reconsider the rejection of claim 78 and dependent claims 79-83.

Aram 2006/0058884

All of the claims were rejected as obvious over Aram 2006/0058884. However, the Aram '884 application is not prior art. The Aram '884 application was filed on Jan. 12, 2005, whereas the present application was filed on Feb 6, 2004. Aram '884 portends to claim priority to provisional application no. 60/535,967 filed on Jan 12, 2004. However, as evidenced by the enclosed papers, Applicants was a named inventor for provisional application no. 60/535,967. Since Applicant is a named inventor of 60/535,967, the application is not an application of "another" as required in §102(e). Accordingly, Applicant requests that the Examiner reconsider the rejection of the claims over Aram '884.

Aubaniac WO 87/02882

Aubaniac is directed to a prosthesis for replacing the articular surfaces on a femur. Since Aubaniac is written in French, it is unclear exactly what Aubaniac teaches. However, Applicant has attached a rough translation of Aubaniac, as produced by an automated translation process, along with an English translation of the abstract as provided by WIPO. As stated in the abstract, the prosthetic in Aubaniac is directed to a variety of elements configured relative to the anatomy of the femoral condyles.

Although it is unclear exactly what Aubaniac teaches, Applicant cannot find any reference anywhere in Aubaniac to a prosthesis having a portion configured to extend along the intercondylar notch, without overlying one of the condyles. In fact, the

entire teaching of Aubaniac appears to be directed to replacing the condylar surfaces and the trochlear surface. The Examiner states that elements 8 and 9 in Figs. 21-24 teach portions that overlie the intercondylar notch without extending onto the condyle. However, the Examiner does not point to any teaching in the description to support the Examiner's contention. In fact, based on the drawings and the enclosed rough translation, it appears that elements 8 and 9 are simply beveled edges of the prosthesis. There is no specific teaching as to what the prosthesis in Figs. 21-24 is configured to overlie and what it is intended to not overlie. Further still, it appears that the device in Figs. 21-24 is designed to overlie part of the condyles and not part of the intercondylar notch. This can be seen more clearly by comparing the device in Figs. 21-24 of Aubaniac with the device illustrated in Fig. 8 of Merchant '696 discussed above. If the trochlear portion 130 illustrated in Fig. 8 were replaced with the prosthesis 1 illustrated in Figs 21-24, the medial and lateral edges of the device would appear to overlie the condyles. Further, it also appears that the device may not extend into the intercondylar notch. Accordingly, it does not appear that Aubaniac teaches the features of claims 14-24, 50-58, and 69-94. If the Examiner still believes that Aubaniac teaches the features of the claims, Applicant's request that the Examiner provide a translation and point to the portions of Aubaniac that teach the features recited in the claims. Otherwise, the Examiner is simply speculating as to how Aubaniac could possibly be configured, which does not satisfy the Examiner's burden to establish a prima facie case of obviousness.

Further still, the only claim that the Examiner has even applied Aubaniac to is claim 84. The Examiner has not applied Aubaniac to any of the other pending claims, and the Examiner has not pointed to how Aubaniac teaches or suggests any of the features in the dependent claims. For instance, the Examiner does not even mention how Aubaniac teaches or suggests the features of claim 59, and there is no discussion of how Aubaniac teaches or suggests the feature of claim 59, which recites a first portion tapering inwardly from a medial and lateral direction to form a narrow

waist adjacent the intersection of the first and second portions. Similarly, the Examiner does not provide any discussion of how Aubaniac teaches the features of independent claim 14, and there is no discussion as to how Aubaniac teaches or suggests such features as the femoral prosthesis comprising a medial extension having a length that is substantially greater than the width, as recited in claim 17. Accordingly, if the Examiner maintains the rejection of claims 14-24, 50-58 and 69-94 over Aubaniac, Applicant requests that the Examiner provide a sufficient description of how Aubaniac makes a prima facie showing of obviousness over each of the claims, so that Applicant can properly respond.

Applicant further requests that the Examiner favorably consider newly presented claims 95-99. None of the references of record teach or suggest the features recited in the newly presented claims.

In light of the foregoing, Applicant believes that this application is in form for allowance. The Examiner is encouraged to contact Applicant's undersigned attorney if the Examiner believes that issues remain that would prevent the Examiner from examining the claims.

Respectfully submitted,

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